SONY®

Operation Software

BZDM-7020

User's Guide
Software Version 3.10

English

Manual to be supplemented

BZDM-7020 User's Guide
1st Edition
Software Version 1.00 and Later

Digital Multi Effects
DME-7000

This User's Guide describes additional functions and changes in Version 3.10 of the BZDM-7020 Operation Software.
Use the pages of this User's Guide for Software Version 3.10 to replace the corresponding pages in your copy of the existing User's Guide.
Pages which are not present in the existing User's Guide are additions.

Quick Enabler

Using the QUICK ENABLER menu, you can directly switch on and off settings for effects including nonlinear effects.

QUICK ENABLER Settings – 1

Use the PAGE button in the numeric keypad section together with the numeric buttons, or click "▲" or "▼" in the top right corner of the menu screen, to select menu page 1 and display the QUICK ENABLER menu.

1 QUICK ENABLER				E ▲ ▼ G 1 2 3 4 R
BKGD	INPUT FREEZE V	MULTIMOVE	POSTERIZATION	COLOR CORRECT
CLEAN KEY	INPUT FREEZE K	DEFOCUS	SOLARIZATION	METAL
BORDER	LAST FREEZE V	BLUR	NEGA Y	
CROP	LAST FREEZE K	DIM	NEGA C	NON-LINEAR
DROP SHADOW	RECURSIVE	FADE	SEPIA	SPLIT
KEY BORDER	U-INPUT FREEZE	GLOW	MONO	MIRROR
WIPE CROP	U-OUTPUT FREEZE	BRICK	CONTRAST Y	LIGHT
BEVELED EDGE	U-LAST FREEZE	COMBINER	CONTRAST C	SPOTLIGHT
		DUALITY	MOSAIC	TARGET LIGHT
AUTO CUBE	GRAPHIC		SKETCH	TARGET SPOT LIGHT

QUICK ENABLER menu display

To change settings
Align the cursor with the item (effect name) you wish to change, and click to toggle the setting on and off.

To jump to the menu corresponding to a particular item
Align the cursor with the item (effect name) and double-click.

For details of each item, see the page number in the following table.

Item	See page
BKGD (background)	5-12
CLEAN KEY	5-14
BORDER	5-15
CROP	5-18
DROP SHADOW	5-20
KEY BORDER	5-26
WIPE CROP	5-29
BEVELED EDGE	*See BKDM-7041 User's Guide*
AUTO CUBE	5-6
INPUT FREEZE V (video input freeze)	5-44
INPUT FREEZE K (key input freeze)	5-44
LAST FREEZE V (video last freeze)	5-44
LAST FREEZE K (key last freeze)	5-44
RECURSIVE	5-46
U-INPUT FREEZE (utility input freeze)	5-59(2)
U-OUTPUT FREEZE (utility output freeze)	5-59(2)
U-LAST FREEZE (utility last freeze)	5-59(2)
GRAPHIC	5-120
MULTIMOVE	5-61
DEFOCUS	5-62
BLUR	5-64
DIM	5-66
FADE	5-66
GLOW	5-67
BRICK	5-69
COMBINER	5-74
DUALITY	5-78(2)
POSTERIZATION	5-80
SOLARIZATION	5-80
NEGA Y (negative luminance)	5-81

(Continued)

Auto Cube Function

Item	See page
NEGA C (negative chrominance)	5-81
SEPIA	5-81
MONO	5-81
CONTRAST Y (luminance contrast)	5-82
CONTRAST C (chrominance contrast)	5-82
MOSAIC	5-84
SKETCH	*See BKDM-7041 User's Guide*
COLOR CORRECT	5-86(5)
METAL	5-86(2)
NON-LINEAR (nonlinear effects)	5-87
SPLIT	5-101
MIRROR	5-106
LIGHT	5-125
SPOTLIGHT	5-129
TARGET LIGHT	5-137
TARGET SPOTLIGHT	5-141

Auto Cube Function

Using the auto cube function to move or rotate any parallelepiped (six faced solid with all opposite faces parallel) such as a cubic or slab, you can automatically carry out the switch between front and back video. Since you can use one image to provide a pair of opposite faces, you can create a symmetrical solid with the minimum number of channels or edit operations.
This section describes how to create a cube or slab, and move or rotate it using the auto cube function.

Creating, Moving, and Rotating a Cube

The first example shows how to create, move, and rotate a cube of side 6.00 units.

Preliminary operations

First make the following settings.
- In the CHANNEL ASSIGN menu *(see page 10-5),* set F5 (GLOBAL ENABLE) to "ON".
- Press the CLR WORK BUFF button twice to clear the parameters in the working key frame buffer.
- In the FRONT KEY menu *(see page 6-6),* set the key signal type to "Internal".
- In the COMBINER menu *(see page 5-74),* set F5 (DEPTH) to "ON".
- In the BKGD menu *(see page 5-13),* set F1 (BKGD) or F7 (CLEAN KEY) to "ON".

Top Menu Display When Using a Source Selector

When using a source selector (when an item other than "A/B" is selected in the SOURCE SELECTOR menu), the IN/OUT menu soft key indications appear as follows.

51 IN/OUT SELECT					55 INPUT INVERT	56 INTERPO-LATION	57 EXT VIDEO IN/OUT	

IN/OUT menu soft key indications (when using a source selector)

⇨ F7 (EXT VIDEO IN/OUT) is only effective in component mode when the BKDM-3050 or BKDM-7020 option is installed.

Selection operation

Press the required function key as shown in the following table to select the required menu.

Function key	Function	See page
F1 (IN/OUT SELECT)	Select input video and key signals.	6-9
F5 (INPUT INVERT)	Invert the input signal.	6-11
F6 (INTERPOLATION)	Select method of interpolation.	6-12
F7 (EXT VIDEO IN/OUT)	Make external video input settings.	6-14

Video Signal and Key Signal Settings
(When Not Using a Source Selector) – 51 to 54

When not using a source selector *(see page 10-19)*, select the video and key signals for each of the front and back of the image. The following figure illustrates the conceptual front and reverse, or back, sides of the image.

Conceptual front and back sides
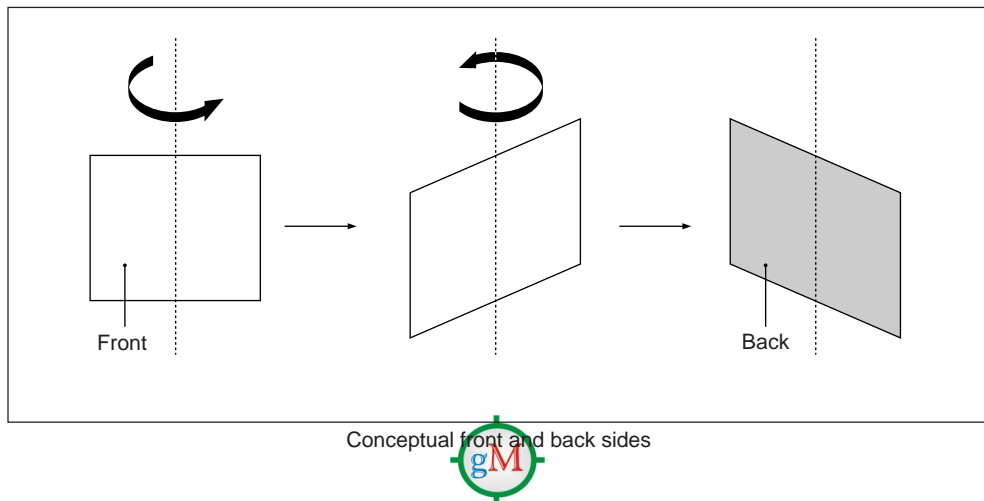
Front Video Settings – 51

In the IN/OUT menu, press F1 (FRONT VIDEO) to display the FRONT VIDEO menu.

SIGNAL	INPUT	FORMAT	TBC CENTER		H SHIFT	SEPARATE SIDE		KF XPOINT HOLD

FRONT VIDEO menu soft key indications

The following is a typical operation carried out in this menu.

Selecting the front video signal

This process involves selecting the video signal for the front of the image, and making the other necessary settings.
Use the following procedure.

1 Press F1 (SIGNAL), to select "Digital" or "Analog".

2 Press F2 (INPUT), to select "A" or "B".
These "A" and "B" signals correspond to the input connectors on the rear panel of the processor.

3 Press F3 (FORMAT), to select the input signal format.
On component systems, this setting and associated indications
are only effective if you selected "Analog" in step **1**.

Pressing F3 cycles through the following possibilities.
- On composite systems: 0 IRE → 7.5 IRE
- On component 525-line systems: SMPTE → B-CAM0 →
    B-CAM7.5
- On component 625-line systems: "EBU" is displayed.

4 Depending on the input signal phase difference, press F4
(TBC CENTER) to change the center position of the time base
corrector window.

Pressing F4 cycles through the values 0H → 0.5H → 1H →
1.5H.
The automatic correction range (the TBC window) is ±0.3H
centered on the center position selected.
When the input signal is from the AUX BUS of a Sony DVS-
series digital video switcher, normally select 1H.

5 Select "Phase", and turn the left knob ("Phas") to adjust the
input signal phase. (–8 to +8)
When using analog signals in a composite system, turn the
center knob ("SC") to adjust the subcarrier phase. (–100 to
+100)

6 To use a two-sided video image, that is with different front
and back video signals, press F6 (SEPARATE SIDE), turning
it on.

When "Separate Side" is on, you can use the BACK VIDEO
menu *(see page 6-8)* to select the back video signal.

(Continued)

7 To input a video signal with an H shift for color framing correction, press F5 (H SHIFT) to make the setting.
Off: No H shift.
Left: Shift the horizontal phase of the video input left by 140 ns to carry out color framing correction.
Right: Shift the horizontal phase of the video input right by 140 ns to carry out color framing correction.

To inhibit cross-point switching during key frame execution
To inhibit cross-point switching for a single key frame, press F8 (KF XPOINT HOLD), turning it on.

Front Key Settings – 52

This menu selects the key signal for the front of the image, and makes the other necessary settings.

In the IN/OUT menu, press F1 (FRONT KEY) to display the FRONT KEY menu.

SIGNAL	INPUT	KEY SOURCE	TBC CENTER		H SHIFT	SEPARATE SIDE	KEY INVERT	KF XPOINT HOLD

FRONT KEY menu soft key indications

The following is a typical operation carried out in this menu.

Selecting the front key signal

This process involves selecting the key signal for the front of the image, and making the other necessary settings.
Use the following procedure.

1 Press F1 (SIGNAL), to select "Digital" or "Analog".

2 Press F2 (INPUT), to select "A" or "B".
These "A" and "B" signals correspond to the input connectors on the rear panel of the processor.

3 Press F3 (KEY SOURCE), to select the key type from one of the following.
Internal: Use the effective area defined using "CROP settings" *(page 5-18)* as the key source.
External: Use an external signal as key source.
Luminance: Use the luminance signal of the input signal as the key source.
Key Off: Force the key signal level to zero.

4 Depending on the input signal phase difference, press F4 (TBC CENTER) to change the center position of the time base corrector window.

Pressing F4 cycles through the values 0H → 0.5H → 1H → 1.5H.
The automatic correction range (the TBC window) is ±0.3H centered on the center position selected.
When the input signal is from the AUX BUS of Sony DVS-series digital video switcher, normally select 1H.

5 If you selected "External" in step **3**, select "Phase", and turn the left knob ("Phas") to adjust the phase. (–8 to +8)
When using analog signals in a composite system, turn the center knob ("Fine") to make finer adjustment of the phase. (–100 to +100)

6 If you selected "Luminance" or "External" in step **3**, adjust the following parameters.
   • Left knob ("Clip"): key signal reference level (–10 to +110%)
   • Center knob ("Gain"): gain of key signal (–100 to +100%)

7 To invert the key signal, press F7 (KEY INVERT), turning it on.

8 To use a two-sided video image, that is with different front and back video signals, press F6 (SEPARATE SIDE), turning it on.

When "Separate Side" is on, you can use the BACK KEY menu *(see page 6-8)* to select the back key signal.

To inhibit cross-point switching during key frame execution
To inhibit cross-point switching for a single key frame, press F8 (KF XPOINT HOLD), turning it on.

Back Video Settings – 53

This menu selects the video signal for the reverse side of the image, and makes the other necessary settings.

In the IN/OUT menu, press F3 (BACK VIDEO) to display the BACK VIDEO menu.

SIGNAL	INPUT	FORMAT	TBC CENTER		H SHIFT	SEPARATE SIDE		KF XPOINT HOLD

BACK VIDEO menu soft key indications

The items shown in this menu, and the function key operations are the same as in the FRONT VIDEO menu.

For details see the section "Front Video Settings – 51" (page 6-4).

Back Key Settings – 54

This menu selects the key signal for the reverse side of the image, and makes the other necessary settings.

In the IN/OUT menu, press F4 (BACK KEY) to display the BACK KEY menu.

SIGNAL	INPUT	KEY SOURCE	TBC CENTER		H SHIFT	SEPARATE SIDE	KEY INVERT	KF XPOINT HOLD

BACK KEY menu soft key indications

The items shown in this menu, and the function key operations are the same as in the FRONT KEY menu.

For details see the section "Front Key Settings – 52" (page 6-6).

Video Signal and Key Signal Settings (When Using a Source Selector) – 51

When using a source selector *(see page 10-19)*, make settings applying to the video and key signals for each of the front and back of the image.
For a reminder of the meanings of "front" and "back" in this context, see the figure on page 6-4.

In the IN/OUT menu, press F1 (IN/OUT SELECT), and the soft key indications appear as follows.

FRONT VIDEO	FRONT KEY	FRONT KEY MODE	FRONT KEY INVERT		SEPARATE SIDE	AUTO KEY SELECT	KF XPOINT HOLD	FRONT /BACK

IN/OUT SELECT menu soft key indications

In this menu, it is possible to select the video and key signals used for both front and back video.

Selecting the front video and key signals

Use the following procedure.

1 Press F1 (FRONT VIDEO).

The system is now ready to accept a front video selection.

2 Enter the button number (0 to 63) of the video signal to be selected using the numeric keypad, and press the ENTER button.

This selects the video signal.

3 To select the key signal by button number, press F2 (FRONT KEY).
To select the key signal previously assigned to the selected video signal, press F6 (AUTO KEY SELECT), turning it on, and skip to step **5**.

4 Enter the button number (0 to 63) of the key signal to be selected using the numeric keypad, and press the ENTER button.

This selects the key signal.

(Continued)

5 Press F3 (FRONT KEY MODE) to select the key type as follows.

Internal: Use the box defined as the effective image area in the section "CROP Settings" *(page 5-18)* as the key source.

External: Use an external key signal as the key source.

Luminance: Use the luminance of the input video signal as the key source.

Key Off: Force the key signal level to zero.

6 If you selected "External" or "Luminance" in step **5**, set the following parameters.
  • Center knob ("Clip"): reference level for key signal generation (–10 to +110%)
  • Right knob ("Gain"): key sensitivity (–100 to +100%)

7 To invert the key signal, press F4 (FRONT KEY INVERT), turning it on.

8 To use different signals for the two sides of the video image, press F5 (SEPARATE SIDE), turning it on.

To inhibit cross-point switching during key frame execution
To inhibit cross-point switching for a single key frame, press F7 (KF XPOINT HOLD), turning it on.

Selecting the back video and key signals

To select the video and key signals for the back of the image, press F8 (FRONT/BACK).
The indications for F1 to F4 change, allowing the video and key signals to be selected for the back of the image.

For details of the settings, see the previous section "Selecting the front video and key signals."

Interpolation Settings – 56

This menu selects the method of interpolation used by the DME-7000 for the input video and key signals.

In the IN/OUT menu, press F6 (INTERPOLATION) to display the INTERPOLATION menu.

FRONT VIDEO	FRONT KEY	BACK VIDEO	BACK KEY		INTERPO TYPE		EXT FR VIDEO	EXT BK VIDEO

INTERPOLATION menu soft key indications

The follwing are some of the operations carried out in this menu.

Methods of interpolation for the video signal

There are four possible methods of interpolation for the video signal, as follows.

Adpt Y/C (Adaptive Y/C): By detecting movement separately in the luminance and chrominance components of the video signal, the system automatically switches between field and frame units. Use this mode normally.

Adpt Y (Adaptive Y): Adaptive processing is applied to the chrominance signal based on the movement detected in the luminance signal.
For details, see the section "Signal Processing Settings 2" (page 10-35).

Frame: Interpolation is carried out in frame units. This provides the best image quality for still frames.

Field: Interpolation is carried out in field units. This provides the most natural motion for moving images.

Methods of interpolation for the key signal

There are three possible methods of interpolation for the key signal, as follows.

Adaptive: By detecting movement from the luminance component of the key signal, the system automatically switches between field and frame units.

Frame: The same as the "Frame" setting for the video signal.

Field: The same as the "Field" setting for the video signal.

Selecting the interpolation method for each signal.

- To change the setting for the front video signal, press F1 (FRONT VIDEO).
- To change the setting for the front key signal, press F2 (FRONT KEY).
- To change the setting for the back video signal, press F3 (BACK VIDEO).
- To change the setting for the back key signal, press F4 (BACK KEY).
- To change the setting for the external video signal input to the front, press F7 (EXT FR VIDEO).
- To change the setting for the external video signal input to the back, press F8 (EXT BK VIDEO).

Pressing F1 or F3 cycles the corresponding setting through Adpt Y/C, Adpt Y, Frame, and Field, in sequence.
Pressing F2, F4, F7 or F8 cycles the corresponding setting through Adaptive, Frame, and Field, in sequence.

Selecting the pixel count for interpolation processing

Press F5 (INTERPO TYPE) to toggle the pixel count for interpolation processing between "Multi" (8×8) and "Linear" (2×2).

Multi: Interpolation processing is carried out for an 8×8 pixel count. This leads to higher image quality, and is therefore the mode for normal use.

Linear: Interpolation processing is carried out for an 2×2 pixel count. Use this mode only when it is necessary to emulate DME-3000 image quality.

Tool bar operations

Clicking on a button in the tool bar executes the corresponding operation as follows.

INS: Insert a key frame. If the edit point is on a key frame, insert after that key frame. (Same as the BEFR/INSRT button)

APEND: Insert a key frame. If the edit point is on a key frame, insert before that key frame. (Same as SHIFT + BEFR/INSRT)

DEL: Delete a key frame. (Same as the DEL button)

MOD: Modify a key frame. (Same as the MOD button)

MOD ALL: Modify multiple key frames. (Same as the MOD ALL button)

CLR WORKS: Clear the working key frame buffer. (Same as the CLR WORK BUFF button)

REV: Reverse the direction of the effect. (Same as the REVS button)

STOP NEXT KF: Run the effect up to the next key frame.

◀◀ : Rewind. (Same as the REW button)

◀| (upper row) : Move back one key frame. (Same as the PREV KF button)

◀| (lower row) : Move to the previous position. (Same as the SHIFT + PREV KF)

◀| : Move back one frame.

■ : Stop the effect.

▶ : Run the effect. (Same as the RUN button)

|▶ : Move forward one frame.

|▶ (upper row) : Move forward one key frame. (Same as the NEXT KF button)

|▶ (lower row) : Move to the next pause position. (Same as the SHIFT + NEXT KF)

▶▶ : Move to the last key frame.

Changing the section of the timeline displayed – F1 (EXPAND)

Use the following procedure to change the start point of the section of the timeline displayed or the scale.

1 Press F1 (EXPAND).

2 To change the start point, adjust the left knob ("Start").

(Continued)

3 To change the length of the section displayed (i.e. the scale), adjust the right knob ("Width").

Displaying the whole of a key frame effect on the timeline – F2 (VIEW ALL)

Use the following procedure.

1 Set F1 (EXPAND) to "ON".

2 Press F2 (VIEW ALL).

This adjusts the time scale so that the whole key frame effect is visible on the timeline.

Setting a pause position – F3 (PAUSE)

This determines the position at which the effect stops after execution.
A maximum of eight pause positions can be set. ("Multi-pause" function)

Notes

• The pause setting is only effective when you execute the effect using the RUN button on the control panel or by a GPI trigger. When executing an effect under the control of a DVS-6000/6000C/7000 switcher system using the key frame link function, or from an editor, the pause setting is ignored.
• When used together with a switcher system which does not support the multi-pause function (DVS series), only one pause position can be set.

1 Select the channel or channels to which the setting is to apply.

2 Stop the effect at the desired pause position.

3 Press F3 (PAUSE).

This sets the pause.

Clearing the pause setting

Stop the effect at the currently set pause position, and press F3 (PAUSE).
This clears the pause setting.

To move the current time to a pause position
Use the following procedure.

1 Select the desired channel.

2 To move the current time to the immediately preceding pause position, hold down the SHIFT button and press the PREV KF button.

To move the current time to the immediately following pause position, hold down the SHIFT button and press the NEXT KF button.

Setting a delay – F4 (DELAY)
This sets a delay from the time at which you carry out the effect execution operation to the time at which the execution actually starts.

1 Select the channel or channels to which the setting is to apply.

2 Press F4 (DELAY).

3 Enter the delay value (seconds.frames) from the numeric keypad, and press the ENTER button.

This sets the entered value as the delay.

Copying a key frame – F5 (COPY TO PASTE BUFFER) and F6 (PASTE AFTER)
These copy a key frame from one position to another.

1 Select the channel or channels to which the operation is to apply.

2 Stop the effect on the source key frame to be copied.

3 Press F5 (COPY TO PASTE BUFFER).

4 Stop the effect at the position to which you wish to copy the key frame.

(Continued)

5 Press F6 (PASTE AFTER).

This copies the key frame.

Copying a number of key frames – F6 (PASTE AFTER)
This copies a number of key frames from one position to another.

1 Select the channel or channels to which the operation is to apply.

2 Carry out steps 1 to 6 of the procedure "Amending a number of key frames together" *(page 7-12)* to specify the set of key frames to be copied.

3 Press F5(COPY TO PASTE BUFFER).

4 Stop the effect at the position to which you wish to copy the first of the key frames.

5 Press F6 (PASTE AFTER).

This copies the key frames.

Setting Up the GPI – 704

Use this menu to set up the processor to accept and be controlled by GPI outputs from a BVE-2000 or other editing control unit. To make these settings effective, set F5 (GPI IF) to "Enable" in the OPERATION menu *(see page 10-7)*.

With the first set of soft key indications shown in the SETUP & DIAG menu, press F4 (GPI IN) to display the GPI menu.

704 GPI IN				E	▲	▼	G	1	2	3	4	R

			ACTION LIST	
GPI No.	Trigger type	Action	NOP	+1 Field
1	Off	NOP	Recall EFF #	−1 Field
2	Off	NOP	Run	4:3
3	Off	NOP	Stop	16:9
4	Off	NOP	Rewind	525
• GPI IN CHANNEL DELEGATION			Freeze	625
			Fwd jitter	D1 Mode
• GPI OUT ONAIR TALLY			Rewind jitter	D2 Mode
			+1 Frame	Snapshot#
			−1 Frame	

TRIGGER TYPE	ACTION PREVIUS	ACTION NEXT	EFFECT NUMBER	■	SNAPSHOT NUMBER	GPI DELEGA- TION		GPI OUT ONAIR TALLY

GPI menu

The following is a typical operation carried out in this menu.

Setting up the GPI inputs
This selects the trigger type and action to be carried out in response to each of the GPI input ports on the DME-7000. Use the following procedure.

1 Use the control panel ⇧ and ⇩ buttons to select the number of the GPI port for which you wish to make the setting.

2 Press F1 (TRIGGER TYPE) to select the trigger type. Pressing F1 cycles through the following possibilities.
Rise edge: Positive pulse. A rising edge acts as the trigger. (⌐⌐)
Fall edge: Negative pulse. A falling edge acts as the trigger. (⌐⌐)
Flip flop: Flip-flop. Each switch in polarity of the signal acts as the trigger. (⟩⟨)
High Active: When the GPI input is high level, switch to the operating mode specified as "ACTION". Effective only when "ACTION" is "4:3", "16:9", "525", or "625".

(Continued)

Low Active: When the GPI input is low level, switch to the operating mode specified as "ACTION". Effective only when "ACTION" is "4:3", "16:9", "525", or "625".
Off: No operation.

3 Press F2 (ACTION PREVIUS) or F3 (ACTION NEXT) to select the trigger action.

Pressing F3 (ACTION NEXT) cycles forward through the possibilities under the heading "ACTION LIST" on the right, and pressing F2 (ACTION PREVIUS) cycles through in the reverse sequence.
NOP: Ignore incoming GPI signals.
Recall EFF #: Recall a key frame effect.
Run: Execute a key frame effect.
Stop: Stop a key frame effect.
Rewind: Rewind a key frame effect.
Freeze: Freeze the input signal to the DME-3000.
Fwd jitter: Each time the GPI signal is input, move forward one frame, and jitter, that is, display fields 1 and 2 alternately.
Rewind jitter: Rewind key frame effect, and jitter, that is, display fields 1 and 2 alternately.
+1 Frame: Move a stopped key frame effect forward by one frame.
–1 Frame: Move a stopped key frame effect back by one frame.
+1 Field: Move a stopped key field effect forward by one field.
–1 Field: Move a stopped key field effect back by one field.
4:3: Select a screen aspect ratio of 4:3
16:9: Select a screen aspect ratio of 16:9
525: Set system operating mode to 525
625: Set system operating mode to 625
Snapshot #: Recall a snapshot.

4 If you selected "Recall EFF #" or "Snapshot #"in step **3**, press F4 (EFFECT NUMBER) or F5 (SNAPSHOT NUMBER), and enter the number of the effect from the numeric keypad.

5 Repeat steps **1** to **4** as necessary to carry out the settings for all of the input ports.

Coupling the ACTION caused by a GPI input to channel selection

To make the "ACTION" effective only with respect to the currently selected channel(s), set F6 (GPI DELEGATION) to "ON". When F6 is set to "OFF", the "ACTION" applies to all connected DME channels.

Note

Regardless of the setting of F6, the "4:3", "16:9", "525", "625", "D1 Mode" and "D2 Mode" settings always apply to all channels.

Outputting an on-air tally

To output ON AIR TALLY from GPI OUT, set F8 (GPI OUT ONAIR TALLY) to "ON".
GPI OUT 1 to 3 are used for outputting tally signals.

GPI OUT	Signal
1	Video on-air tally
2	EXT video on-air tally
3	Combiner on/off tally

Notes

• The video on-air tally is not supported for nonlinear effects.
• The EXT video on-air tally is on when the EXT video is selected.

Input Signal Settings – 712

These settings provide adjustment of the signals input to the DME-7000 from the source selector.

For the method of selecting the input signals, see page 6-9.

With the second set of soft key indications shown in the SETUP & DIAG menu, press F2 (INPUT CONTROL) to display the INPUT CONTROL menu.

```
712 INPUT CONTROL                                   E ▲ ▼ G 1 2 3 4 R

      Input Button         12
      Signal Type          • Digital    • Analog
      Xpt Number           34
      Signal Format        • SMPTE   • B-CAM 0    • B-CAM 7.5
      TBC Center           • 0H      • 0.5H   • 1H    • 1.5H
      Phase                Phas    1.23    SC  4.56
      H Shift              • Off       • Left   • Right


  INPUT        ⇧          ⇩         SIGNAL       XPT       SIGNAL      TBC      H SHIFT
  BUTTON                             TYPE      NUMBER      FORMAT    CENTER
```

INPUT CONTROL menu

F8 (H SHIFT) appears only in composite mode.

The following operation is carried out in this menu.

Making the input signal settings

1 Use one of the following methods to display the button number for the source selector (0 to 63) under the "Input Button" item.

For details of button numbers when two DVS-V1201 or BVS-V1201 units are connected together as source selector, see the figure on page 10-26.

- Press F2 (⇧) or F3 (⇩) to increment or decrement the number.
- Press F1 (INPUT BUTTON), then enter the button number using the numeric keypad.

This selects the signal to which the setting adjustment is to be made.

(Continued)

2 Press F4 (SIGNAL TYPE), to select "Digital" or "Analog".

3 Press F5 (XPT NUMBER), then enter the DME cross-point number assigned to the input button number selected in step **1**, using the numeric keypad, and in the following ranges.

Digital video switcher: no specification required
BKDM-5080: 1 to 32
BVS-V1201/DVS-V1201: 1 to 23

For details of the assignment of DME cross-point numbers on BVS-V1201/DVS-V1201 units, see "Assignment of DME cross-point numbers on BVS-V1201/DVS-V1201 units" (page 10-26).

4 Press F6 (SIGNAL FORMAT), to select the signal format.

Pressing F6 cycles through a range of possibilities, as follows.
• Composite systems: 0 IRE → 7.5 IRE
• Component systems, 525 lines: SMPTE → B-CAM 0 → B-CAM 7.5
• Component systems, 625 lines: EBU (display only)

Note
In a component system, this operation is only valid if you selected "Analog" in step **2** above.

5 Depending on the input signal phase difference, press F7 (TBC CENTER) to change the center position of the TBC window.

Pressing F7 cycles through the values 0H → 0.5H → 1.0H → 1.5H.
The automatic correction range (the TBC window) is ±0.3H centered on the center position selected.

When using a Sony digital video switcher (DVS-2000-series, DVS-6000/6000C, DVS-7000, DVS-8000/8000C, etc.) or a BKDM-5080 as source selector, normally select 1H.
If using a BVS-V1201/DVS-V1201, select 0H.

6 Turn the left knob ("Phas") to adjust the phase. (–8 to +8)

For a composite analog signal, it is also possible to adjust the subcarrier phase using the center knob ("SC"). (–100 to +100)

7 To input a video signal with an H shift for color framing correction, press F8 (H SHIFT) to make the setting.
Off: No H shift.
Left: Shift the horizontal phase of the video input left by 140 ns to carry out color framing correction.
Right: Shift the horizontal phase of the video input right by 140 ns to carry out color framing correction.

The setting of F8 is stored independently for each input button number.

D2 VTR color framing correction
In an editing system using D2 VTRs, if a section of video which has passed through the DME is joined to a section which has not passed through the DME in a single scene, at the cut point there may be a dislocation in the horizontal phase. This occurs because the signal from the playback D2 VTR which has passed through the DME is still subject to a horizontal shift to correct the color framing. The reason for carrying out the horizontal shift on the playback VTR is as follows.

Because of the one frame delay for passing through the DME, the edit IN point is advanced one frame on the playback D2 VTR. As a result, there is a phase difference in the color framing between the reference signal subcarrier and the playback signal subcarrier. To correct for this phase difference, the image is output from the playback VTR with a horizontal shift (H shift processing).

Assignment of DME cross-point numbers on BVS-V1201/DVS-V1201 units

When using two BVS-V1201 or DVS-V1201 units connected together, input the output of the second unit to input 12 of the first unit. In this case the DME cross-point number assignment is as shown in the following figure.
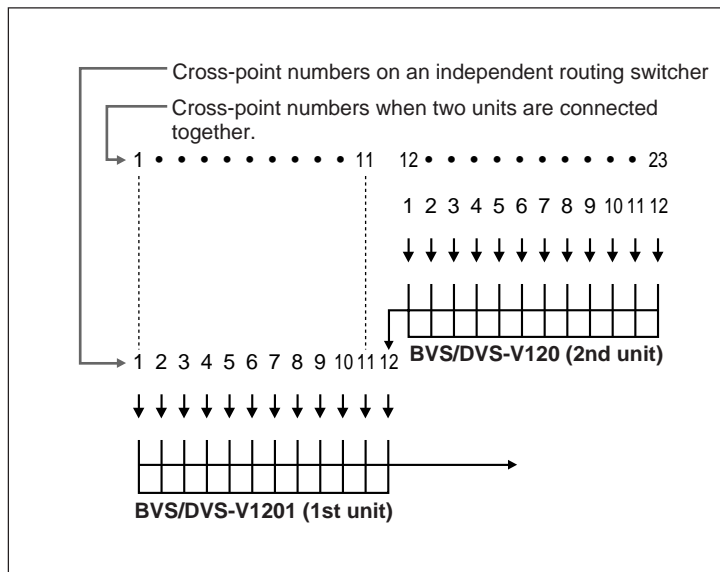
DME cross-point number assignment on BVS-V1201/DVS-V1201 units

Control Panel Button Allocations – 733

You can change the functions to which particular control panel buttons are allocated.

Press the PAGE button in the keypad section, then enter menu page number 733 to display the BUTTON ASSIGN menu.

| 733 BUTTON ASSIGN | | | | | | | | E | ▲ | ▼ | G | 1 | 2 | 3 | 4 | R |

1	1:SWITCH W	2	2:F1	3	3:F2	4	4:F3	5 5:F4
6	6:F5	7	7:F6	8	8:F7	9	9:F8	10 10:EXIT
16	16:[10]	17	17:[20]	18	18:[30]	19	19:[40]	20 20:[50]
21	21:[60]	22	22:[70]	23	23:[100]	24	24:[200]	25 25:[300]
26	26:[400]	27	27:[500]	28	28:[600]	29	29:[700]	30 30:LAST MENU
36	36:UP	37	37:DOWN	39	39:RECAL EFF	40	40:STORE EFF	41 41:CLR W BUFF
43	43:REW	46	46:UNDO	48	48:DUR	49	49:DEL	51 51:MOD
52	52:SHIFT	53	53:PREV KF	54	54:NEXT KF	55	55:GOTO	56 56:INSRT
66	66:CTR	67	67:VELO HOLD	68	68:SEL/FINE	69	69:KNOB LEFT	70 70:KNOB CTR
71	71:KNOB RIGHT	72	72:PAGE	73	73:[7]	74	74:[8]	75 75:[9]
76	76:+/-	77	77:[4]	78	78:[5]	79	79:[6]	80 80:CLR
81	81:[1]	82	82:[2]	83	83:[3]	84	84:TRIM	85 85:[0]
86	86:.	87	87:ENTER					

11	11:GLBL	12	12:CHI	13	13:CH2	14	14:CH3	15 15:CH4
31	31:FREEZE	32	32:RUN CTRL	33	33:CURSOR	34	34:SRCE	35 35:TRGT
38	38:EDIT ENABL	42	42:RUN	44	44:REVS	45	45:STP NEXT KF	47 47:CNST DUR
50	50:MOD ALL	57	57:SKEW PERS	58	58:LOC SIZE	59	59 LOC XYZ	60 60:ORTHG
61	61:AXIS LOC	62	62:ROT	63	63:X	64	64:Y	65 65:Z

```
                                              ○ MEMORY1    BUTTON ASSIGN
                                              ○ MEMORY2       MEMORY
                                              ○ MEMORY3    ┌─────────┐
SRCE LOC XYZ    ▲X 0.0000 ▲Y    0.0000▲Z    ● MEMORY4    │ EMPTY   │
                                                         │ FULL    │
                                                         └─────────┘
                             0.0000      PAGE=733
                                         Button Assign Changed.
```

| | | SET DEFAULT | | SELECT MEMORY | LOAD MEMORY | SAVE MEMORY | |

Interpreting the menu display

The buttons on the control panel are numbered from 1 to 87.
- The blue number to the left of each item is the number of the button to which it is currently allocated.
- The number to the right and the legend are the fixed assigned number and the button name on the control panel.

For example, if the function of the CURSOR button (button number 33) is assigned to the RUN CTRL button (button number 32), it appears as follows.

33 32 RUN CTRL

The buttons are displayed in two groups: the upper group contains the buttons with no LEDs, and the lower group the buttons with LEDs. It is not possible to assign functions from one group to buttons of the other group.
As an exception, it is possible to assign "RUN" to the SEL/FINE button.
Items shown in red (Function, Exit, Channel, and numeric keypad section) cannot be assigned.

Copying the function of one button to another
Click the left mouse button on the source item for the copy, and drag to the destination item.
The indication of the allocated number changes, and the button name changes to violet.

Restoring a button to its original allocation
Click the left mouse button on the changed item.
This changes back the button number and name to their original values.

Restoring the buttons to their factory defaults – F3 (SET DEFAULT)
Press F3 (SET DEFAULT).
This restores the buttons to their factory defaults.

Saving the button allocations – F5 (SELECT MEMORY), F7 (SAVE MEMORY)

To save the changed button allocations in nonvolatile memory within the control panel, use the following procedure.

1 Press F5 (SELECT MEMORY).

2 Select the memory by number (1 to 4).

3 Press F7 (SAVE MEMORY).

This saves the button allocations in memory within the control panel, and the register indications change to light blue (FULL).

If a set of button allocations is already stored in this memory, the following message appears.

Do you want to overwrite ? [OK](ENTER)/[CANCEL](EXIT)

To overwrite, press the ENTER button, and to cancel the operation press the EXIT button.

Loading button allocations – F5 (SELECT MEMORY), F6 (LOAD MEMORY)

Use the following procedure.

1 Press F5 (SELECT MEMORY).

2 Select the memory by number (1 to 4).

3 Press F6 (LOAD MEMORY).

This loads the button allocations from memory in the control panel.